



NASA's Impact in South Dakota: A Tech Transfer Perspective

You know that NASA studies our planet, our sun, the solar system, and the Universe.
But did you know about the space program's economic impact here on Earth?



In 2011, NASA invested nearly **\$4 million** in the state of South Dakota.

Since 2001, NASA's SBIR/STTR Program has invested over **\$1.2 billion** nationwide.

How NASA's SBIR/STTR Program Benefits the U.S. Economy

NASA is committed to moving technologies and innovations into the mainstream of the U.S. economy, and the Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) program helps fulfill this goal.

SBIR/STTR stimulates technological innovation by encouraging small, high-tech companies—particularly minority and disadvantaged businesses—to partner with NASA to help meet its research and development needs in key technology areas. At the same time, this program strengthens small companies by enabling them to bring cutting-edge new products into the U.S. economy.

(Visit <http://sbir.nasa.gov> for more information on the SBIR/STTR program.)



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Featured Spinoff to South Dakota Company



NASA Know-How Enhanced Water Jetting System for Use in Quarries and on Bridges (Milbank)

A NASA technology originally developed to clean an ablative coating from the space shuttle's solid rocket boosters evolved into an innovative water jetting system

used to remove granite blocks from quarries and concrete from bridges. Hi-Tec, Inc. initiated the development of a less noisy method for removing granite from quarries because existing removal equipment was so deafening it endangered workers' hearing. Hi-Tec produced a completely automatic water jetting system that cut rock and granite at a pressure of 19,000 pounds per square inch. The company also produced a lower pressure water jetting system that removed deteriorating concrete from the surfaces of bridges undergoing reconstruction. In addition to reducing noise, both automated systems increased production rates, reduced labor costs, and suppressed dust.

NASA actively seeks partnerships with U.S. companies that can license NASA innovations and create "spinoffs" in areas such as health and medicine, consumer goods, transportation, renewable energy, and manufacturing. This activity benefits the regional economy and strengthens the nation's competitiveness in the global marketplace. NASA has helped 14 South Dakota companies develop revolutionary spinoff technologies.

Learn more about how NASA innovations benefit the public in *Spinoff*, which highlights NASA's technology transfer successes. (Available at: <http://www.sti.nasa.gov/tto>)

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